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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,572	08/01/2003	Il-Man Bae	9898-292	5017

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MARGER JOHNSON & McCOLLOM, P.C.  
1030 S.W. Morrison Street  
Portland, OR 97205

EXAMINER

HO, HOAI V

ART UNIT PAPER NUMBER

2818

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/632,572

Applicant(s)

BAE ET AL.

Examiner

Hoai V. Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☒ Certified copies of the priority documents have been received in Application No. 10/187,718.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/2/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. This office acknowledges receipt of the following items from the Applicant:

Information Disclosure Statement (IDS) was considered.

Papers submitted under 35 U.S.C. 119(a)-(d) have been placed of record in the file.

2. Claims 1-8 are presented for examination.

#### *Drawings*

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **apparatus to support the method claims** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

#### *Claim Rejections - 35 USC § 112*

4. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: a circuit shows structural cooperative relationships of elements between signals such as a mode set command, a precharge command to support the method claims.

#### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Lim et al. U. S. Patent No. 6081460 (IDS).

Figures 2 and 4 to 6 of Lim are directed to a method for generating an initializing signal (VCCHB) to initialize the inner circuits (209) of a semiconductor memory device, the method comprising the steps of: (a) receiving a mode set command (e. g., test mode, refresh mode, col. 4, line 33) for initializing the inner circuit; and (b) generating a control signal (PMODE) in response to the received mode set command and using the control signal as the initializing signal. See column 1, lines 50-53, column 3, lines 26-31 and column 4, lines 23-38.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. U. S. Patent No. 6081460 (IDS).

Figures 2 and 4 to 6 of Lim are directed to a method for generating an initializing signal (VCCHB) to initialize the inner circuits (209) of a semiconductor memory device, the method comprising the steps of: (b) receiving a mode set command (e. g., test mode, refresh mode, col. 4, line 33) for initializing the inner circuit; and (c) generating a control signal (PMODE) in

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response to the received mode set command and using the control signal as the initializing signal. See column 1, lines 50-53, column 3, lines 26-31 and column 4, lines 23-38.

Figure 6 in a step 601 or in column 4, line 25 of Lim discloses generating an input signal (e. g., address signal  $A_i$ ) instead of (a) receiving a precharge command for precharging the semiconductor memory device as the claimed invention. It would have been obvious to a person of ordinary skill in the art at the time invention was made to recognize that Lim could have the input signal such as the precharge command for precharging the semiconductor memory device as the claimed invention, since the precharge command should be provided in the semiconductor memory device (e.g., DRAM device, col. 1, lines 20-22) in order to precharge the bit lines of the DRAM device.

9. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. U. S. Patent No. 6081460 (IDS) in view of Lee et al. U. S. Patent No. 6633504 (IDS).

Lim, starting at column 1, lines 29-34, discloses silence about wherein the mode set command is a mode register set (MRS) command in dynamic random access memory (DRAM) except for a synchronous DRAM.

However, this limitation was well known in the art at the time the invention was made. For example, Lee, starting at column 1, lines 50-53, discloses wherein the mode set command is a mode register set (MRS) command in a synchronous dynamic random access memory (DRAM). It would have been obvious to a person of ordinary skill in the art at the time invention was made to recognize that Lee could have wherein the mode set command is a mode register set (MRS) command in a synchronous dynamic random access memory (DRAM) as the claimed

invention in order to conduct for synchronizing the mode set command in the synchronous dynamic random access memory (DRAM).

10. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. U. S. Patent No. 6081460 (IDS) in view of Shakkarwar U. S. Patent No. 5822766 (IDS).

Lim discloses all the subject matter claimed except for silence about wherein the mode set command is a Write Column address strobe (CAS) Before Row address strobe (RAS) (WCBR) in an asynchronous dynamic random access memory (DRAM).

However, Shakkarwar, starting at column 3, lines 12-16, discloses wherein the mode set command is a Write Column address strobe (CAS) Before Row address strobe (RAS) (WCBR) in an asynchronous dynamic random access memory (DRAM). It would have been obvious to a person of ordinary skill in the art at the time invention was made to modify Lim circuit which utilizes the Write Column address strobe (CAS) Before Row address strobe (RAS) (WCBR) in an asynchronous dynamic random access memory (DRAM) as taught by Shakkarwar in order to differentiates the DRAM command.

11. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

12. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02 (b)).

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is (571) 272-1777. Other inquiries of this application should be called to (571) 272-1562 or the fax number (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



H. Ho  
July 14, 2004



Hoai V. Ho  
Primary Examiner  
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